

REMARKS

The applicant respectfully requests reconsideration in view of the amendment and the following remarks. The applicant has incorporated portions of claim 2 into claim 1 in order to overcome the 35 U.S.C. 112, first paragraph rejection.

Claims 1-24 are rejected under 35 U.S.C. 112, first paragraph because the specification while being enabling for some compounds used as matrix materials, does not reasonably provide enablement for the full scope of the claims. Claims 1-2 and 23-24 are rejected under 35 U.S.C. 102(b) as being anticipated by DE 103 10 887.4 or WO 2004/081017 (Stossel). Claims 1-3, 5-12, 16-22 are rejected under 35 U.S.C. 102(b) as being anticipated by DE 103 17 556.3 or WO 2006/0208221 (Gerhard). Claims 4 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gerhard. Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gerhard in view of 20020182441 (Lamansky). The applicant respectfully traverses these rejections.

Response to Interview Summary

The undersigned called the Examiner on June 24, 2009, to point out some inadvertent errors made in the Office Action by the USPTO. The undersigned noted in section 13 in the Office Action, WO 2006/0208221 should be replaced by WO 2004/093207. The rejections that were corrected are as follows:

Claims 1-3, 5-12, 16-22 are rejected under 35 U.S.C. 102(b) as being anticipated by DE 103 17 556.3 or WO 2006/0208221 (Gerhard). The US PG Pub 2006/0208221 is being relied upon as a direct translation of WO 2006/0208221.

Claims 1-3, 5-12, 16-22 are rejected under 35 U.S.C. 102(b) as being anticipated by DE 103 17 556.3 or WO 2004/093207 (Gerhard). The US PG Pub 2006/0208221 is being relied upon as a direct translation of WO 2004/093207.

The undersigned also pointed out that the IDS(s) sheets were not initialed by the Examiner. The Examiner forwarded initialed IDS sheets. In addition, the undersigned pointed out that the rejection should not have been 35 U.S.C. 102 (b) rejections because the references were not published over one year. The Examiner stated that the applicant should point this out in their response.

Rejections Under 35 U.S.C. 112

Claims 1-24 are rejected under 35 U.S.C. 112, because the specification while being enabling for some compounds used as matrix materials, does not reasonably provide enablement for the full scope of the claims.

With the current amendment to claim 1, particularly the limitations introduced to the chemical structure of the hole blocking material B, the objection of the examiner that the description is not enabling as to how the claimed compounds can be prepared (item 4) and that some of the claimed compounds are impossible to prepare (item 3) should be removed. The hole blocking material B is now characterized in that it has one of the four related structures (1) to (4), and the groups X and Y are restricted to the commonly used heteroatoms in organic chemistry.

The applicant believes that the number of working examples is sufficient to justify the scope of the amended claims.

The objection that the claims encompass substances which are impossible to use in electronic devices due to their volatility (item 8) should be removed by the amendments made to claim 1, in particular the restriction that the hole blocking material has to have a molecular weight of more than 150 g/mol.

The applicant believes that the claims as amended are in compliance with 35 U.S.C. 112, first paragraph. For the above reasons, this rejection should be withdrawn.

Rejections Under 35 U.S.C. 102(b) over Stossel

Claims 1-2 and 23-24 are rejected under 35 U.S.C. 102(b) as being anticipated by DE 103 10 887.4 or WO 2004/081017 (Stossel). The applicant points out that Stossel does not qualify as a 102 (b) reference. 35 U.S.C. 102 (b) states

35 U.S.C. 102 Conditions for patentability; novelty and loss of right to patent.

A person shall be entitled to a patent unless

(b) the invention was patented or described in a **printed publication** in this or a foreign country or in public use or on sale in this country, **more than one year prior to the date of the application for patent in the United States**, or

Below is a family search of Stossel which indicates that the earliest publication date is September 23, 2004 (WO2004081017) and September 30, 2004 (DE10310887 (A1)).

Family list
7 application(s) for: WO2004081017 (A1)

Metal complexes	
Inventor: HUBERT STOEDEL PHILIPP SPREITZ [DE]	Applicant: COVION ORGANIC SEMICONDUCTORS [DE]
EC: C07D213/30; C07D217/16; (+1)	IPC: C07F1/12; C07D213/30; C07D217/16; (+7)
Publication info:	CN1759120 (A) — 2006-04-12

2	METAL COMPLEXES Inventor: STOESEL PHILIPP [DE] ; SPREITZER HUBERT [DE] EC: C07D213/30; C07D217/16; (+1) Publication info:	Applicant: COVION ORGANIC SEMICONDUCTORS [DE] IPC: C07D213/30; C07D217/16; C07F15/00; (+7) DE10310887 (A1) — 2004-09-30
3	METAL COMPLEXES Inventor: STOESEL PHILIPP [DE] ; SPREITZER HUBERT [DE] EC: C07D213/30; C07D217/16; (+1) Publication info:	Applicant: COVION ORGANIC SEMICONDUCTORS [DE] IPC: C07D213/30; C07D217/16; C07F15/00; (+6) EP1603923 (A1) — 2005-12-14 EP1603923 (B1) — 2007-05-30 EP1603923 (B9) — 2007-10-31
4	METAL COMPLEXES Inventor: EC: C07D213/30; C07D217/16; (+1) Publication info:	Applicant: IPC: C07F5/06; C07D213/30; C07D217/16; (+13) JP2007524585 (T) — 2007-08-30
5	METAL COMPLEXES Inventor: STOESEL PHILIPP [DE] ; SPREITZER HUBERT [DE] EC: C07D213/30; C07D217/16; (+1) Publication info:	Applicant: COVION ORGANIC SEMICONDUCTORS [DE] IPC: C07F1/12; C07D213/30; C07D217/16; (+7) KR20060002810 (A) — 2006-01-09
6	Metal complexes Inventor: STOSSEL PHILIPP [DE] ; SPREITZER HUBERT [DE] EC: C07D213/30; C07D217/16; (+1) Publication info:	Applicant: COVION ORGANIC SEMICONDUCTORS [DE] IPC: H01L29/08; C07D213/30; C07D217/16; (+7) US2006220004 (A1) — 2006-10-05
7	METAL COMPLEXES Inventor: STOESEL PHILIPP [DE] ; SPREITZER HUBERT [DE] EC: C07D213/30; C07D217/16; (+1) Publication info:	Applicant: COVION ORGANIC SEMICONDUCTORS [DE] IPC: C07D213/30; C07D217/16; C07F15/00; (+6) WO2004081017 (A1) — 2004-09-23

The priority date of the PCT is not applicable. Since the PCT published in German, it is not a reference under 102 (e) based on its PCT filing date. Therefore, the earliest date that Stossel qualifies as a reference is September 23, 2004. This would be a 35 U.S.C. 102 (a) reference. The applicant has enclosed **an English Certified translation of their priority document 103 57 315.1 filed December 5, 2003.** The applicant believes that they are entitled to their priority date of December 5, 2003 which would antedate Stossel. For the above reasons, this rejection should be withdrawn.

Rejections over Gerhard

Claims 1-3, 5-12, 16-22 are rejected under 35 U.S.C. 102(b) as being anticipated by DE 103 17 556.3 or WO 2006/0208221 (Gerhard). Claims 4 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gerhard. Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gerhard in view of 20020182441 (Lamansky). All of these rejections are based on the primary reference of Gerhard. Below is the family search for WO2004093207.

It appears that the earliest publication for the family of patents is October 28, 2004. Below is the family search for WO2004093207 which indicates that the . the earliest publication date is October 28, 2004 (WO2004093207) and November 4, 2004 (DE10317556 (A1)).

Family list

9 application(s) for: WO2004093207 (A2)

1	Mixtures of matrix materials and organic semiconductors capable of emission, use of the same and electronic components containing said mixtures	in my patents list <input type="checkbox"/>
	Inventor: HUBERT GERHARD ANJA VESTWEBER [DE] EC: C07D251/20; C07C49/223; (+14)	Applicant: COVION ORGANIC SEMICONDUCTORS [DE] IPC: C09K11/06; C07C49/223; C07C49/417; (+26)
	Publication info:	CN1774491 (A) — 2006-05-17
2	Mixtures for use in organic electronic devices of simplified layer structure comprise matrix materials (some of which in e.g. (hetero)aromatic ketone form are new) and emitters containing an element of atomic number above 20	in my patents list <input type="checkbox"/>
	Inventor: EC: C07D251/20; C07C49/223; (+14)	Applicant: COVION ORGANIC SEMICONDUCTORS [DE] IPC: C07C49/223; C07C49/417; C07C49/67; (+24)
	Publication info:	DE10317556 (A1) — 2004-11-04
3	Mixtures for use in organic electronic devices of simplified layer structure comprise matrix materials (some of which in e.g. (hetero)aromatic ketone form are new) and emitters containing an element of atomic number above 20	in my patents list <input type="checkbox"/>
	Inventor: GERHARD ANJA [DE]; VESTWEBER HORST [DE] (+1)	Applicant: COVION ORGANIC SEMICONDUCTORS [DE]

EC: C07D251/20; C07C49/223; (+14)

IPC: C07C49/223; C07C49/417; C07C49/67; (+23)

Publication info:

DE10355358 (A1) — 2005-07-07

4 MIXTURES OF MATRIX MATERIALS AND ORGANIC SEMICONDUCTORS CAPABLE OF EMISSION, USE OF THE SAME AND ELECTRONIC COMPONENTS CONTAINING SAID MIXTURES

in my patents list ☐

Inventor: GERHARD ANJA [DE];
VESTWEBER HORST [DE] (+3)
EC: H01L51/00M6D; C07C49/223; (+18)

Applicant: COVION ORGANIC SEMICONDUCTORS [DE]

IPC: C07C49/223; C07C49/417; C07C49/67; (+31)

Publication info:

EP1618170 (A2) — 2006-01-25

5 Mixtures of matrix materials and organic semiconductors capable of emission, use of the same and electronic components containing said mixtures

in my patents list ☐

Inventor: GERHARD ANJA DR [DE];
VESTWEBER HORST DR [DE] (+3)
EC: C07C49/223; C07C49/417; (+17)

Applicant: MERCK PATENT GMBH [DE]

IPC: C09K11/06; C07C49/223; C07C49/417; (+26)

Publication info:

EP1717291 (A2) — 2006-11-02

EP1717291 (A3) — 2007-03-21

6 MIXTURES OF MATRIX MATERIALS AND ORGANIC SEMICONDUCTORS CAPABLE OF EMISSION, USE OF THE SAME AND ELECTRONIC COMPONENTS CONTAINING SAID MIXTURES

in my patents list ☐

Inventor:
EC: H01L51/00M6D; C07C49/223; (+18)

Applicant:

IPC: C09K11/06; C07C49/223; C07C49/417; (+27)

Publication info:

JP2006523740 (T) — 2006-10-19

7 MIXTURES OF MATRIX MATERIALS AND ORGANIC SEMICONDUCTORS CAPABLE OF EMISSION, USE OF THE SAME AND ELECTRONIC COMPONENTS CONTAINING SAID MIXTURES

in my patents list ☐

Inventor: GERHARD ANJA [DE];
VESTWEBER HORST [DE] (+3)
EC: H01L51/00M6D; C07C49/223; (+18)

Applicant: COVION ORGANIC SEMICONDUCTORS [DE]

IPC: C09K11/06; C07C49/223; C07C49/417; (+28)

Publication info:

KR20060003020 (A) — 2006-01-09

8 Mixtures of matrix materials and organic semiconductors capable of emission, use of the same and electronic components containing said mixtures

in my patents list ☐

Inventor: GERHARD ANJA [DE];
VESTWEBER HORST [DE] (+3)
EC: H01L51/00M6D; C07C49/223; (+18)

Applicant: COVION ORGANIC SEMICONDUCTORS [DE]

IPC: C09K11/06; C07C49/223; C07C49/417; (+27)

Publication info:

US2006208221 (A1) — 2006-09-21

US7345301 (B2) — 2008-03-18

9 MIXTURES OF MATRIX MATERIALS AND ORGANIC SEMICONDUCTORS CAPABLE OF EMISSION, USE OF THE SAME AND ELECTRONIC COMPONENTS CONTAINING SAID MIXTURES

in my patents list ☐

Inventor: GERHARD ANJA [DE];
VESTWEBER HORST [DE] (+3)
EC: H01L51/00M6D; C07C49/223; (+18)

Applicant: COVION ORGANIC SEMICONDUCTORS [DE]; GERHARD ANJA [DE] (+4)

IPC: C07C49/223; C07C49/417; C07C49/67; (+28)

Publication info:

WO2004093207 (A2) — 2004-10-28
WO2004093207 (A3) — 2005-06-09

The priority date of the PCT is not applicable. Since the PCT published in German, it is not a reference under 102 (e) based on its PCT filing date. Therefore, the earliest date that Gerhard qualifies as a reference is October 28, 2004. This would be a 35 U.S.C. 102 (a) reference. The applicant has enclosed **an English Certified translation of our priority document 103 57 315.1 filed December 5, 2003.** The applicant believes that they are entitled to their priority date of December 5, 2003 which would antedate Gerhard. Since the primary reference is no longer prior art, these rejections should be withdrawn.

In view of the above amendment, applicant believes the pending application is in condition for allowance.

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 03-2775, under Order No. 14113-00013-US from which the undersigned is authorized to draw.

Dated: September 18, 2009

Respectfully submitted,

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Enclosure: English translation of the priority document
DE 103 57 3151, filed December 05, 2003